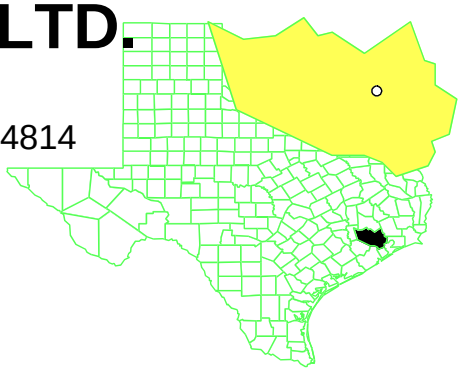
FRENCH, LTD.
TEXAS
EPA ID# TXD980514814
Site ID: 0602498



EPA REGION 6
CONGRESSIONAL
DISTRICT 09
Harris County

Updated: June 8,2004

Site Description

Location:
- The site is located in northeast Harris County, two miles southwest of Crosby, Texas, one mile east of the San Jacinto River, at old US Highway 90 and Gulf Pump Road.

Population:
- Approximately 10,000 residents in Crosby and nearby communities.

Setting:
- The nearest residence is within 300 feet of the main pit.
- The nearest drinking water well is within 1,500 feet of the main pit.
- The entire site encompasses approximately 22.5 acres, with one 7 acre waste pit of 10.5 ft. average depth.

Hydrology:
- The site is located within l00-year floodplain of the San Jacinto River.
- The Gulf Coastal Plain overlies the Chicot and Evangeline aquifers.
- The main pit lies within alluvial deposits over the Beaumont Clay formation.
- A shallow ground water system (20-50 feet deep) is in use by nearby residents.

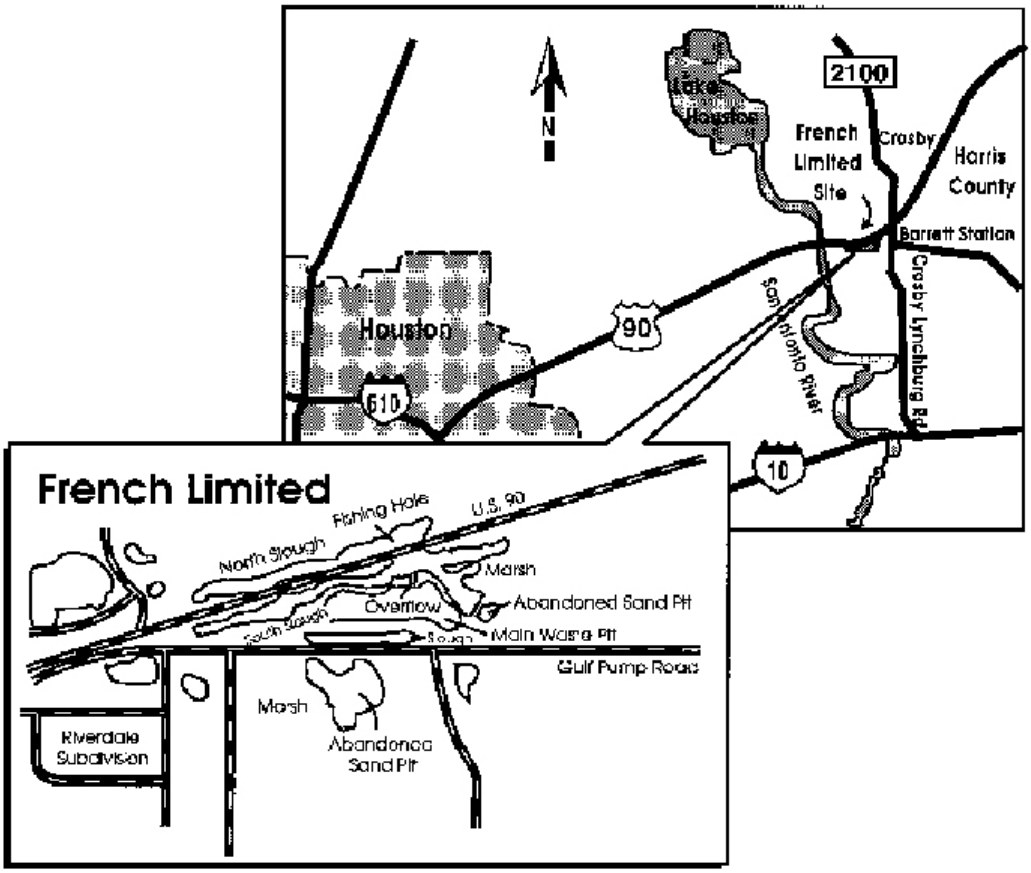
Wastes and Volumes

- The principal pollutants at the French Limited Superfund site include:
  - Volatile organic compounds in; ground water (10 ppm); sludges (6%).
  - Phenols; ground water (10 ppm), sludges (1%).
  - Heavy metals; sludges (2%).
  - PCB; sludges (0-320 ppm).
- The volumes of these wastes are approximately as follows:
  - Sludges; PCB 8,000 cubic yards; non-PCB 68,000 cu. yds.
  - Water, 25 million gallons.
  - Soil, 70,000 cu. yds.

Site Assessment and Ranking

NPL LISTING HISTORY
Site HRS Score: 69.83
Proposed Date: 10/81
Final Date: 9/08/83
NPL Update: No. 1

Site Map and Diagram



The Remediation Process

Site History:

- The site was used for sand mining operations between 1950 and 1965.
- The site operated from 1966 until 1972 under permit from Texas Water Quality Board for Petrochemical Waste Disposal.
- Approximately 3.4 million cubic feet of material were received, some burned; remainder placed in pit.
- The facility's permit was revoked and the operation closed in 1973.

- During 2/80 through 6/83, EPA was involved in three (3) removal actions to stabilize the site, which included maintaining site security, sampling and analysis, migration control, and pumping and containment of 992 cubic yards of contaminated sludge.
- May 1989 flood waters inundated the site, creating concerns for drinking water supplies; EPA supplied bottled water during this time.
- May 1994 flood waters again inundated the site. The flood waters crested three inches from the top of the flood control wall. The wall functioned as designed.

Health Considerations:

- Ground water and surface water are for drinking and irrigation.
- Measurable levels of contamination in the air have been detected.
- Direct contact risk from contaminated sludges and soils.

Other Environmental Risks:

- The nearest drinking water well is 1,500 feet southwest of the waste lagoon.
- The site is in the floodplain of the San Jacinto River.
- Ground water in the upper aquifer is contaminated.

Record of Decision

Signed: March 24, 1988

Water:

- Extract ground water from beneath the site, and treat to state discharge standards prior to discharge into San Jacinto River.
- Contaminated site surface water treatment to standards and discharged into San Jacinto River.
- On-site water treatment plant utilizes Biological Remediation and Carbon Absorption to reach discharge standards.

Soil Treatment:

- Contaminated soils and sludges treatment onsite with in-situ biodegradation.

Other Remedies Considered	Reason Not Chosen
1. "No Action"	**Did not meet remedial objectives**
2. Thermal Destruction	**Not cost effective**
3. Thermal Destruction of sludges	**Non-compliance of State and Federal environmental regulations regarding long-term reliability and continued protection of human health and the environment.**
4. Slurry Wall/Multi-Layered Cap	**Not cost effective; non-compliance of State and Federal environmental regulations regarding long-term reliability and continued protection of human health and the environment.**

Community Involvement

- Community Involvement Plan: Developed 4/87, revised 4/89
- Open houses and workshops: 5/87, 8/90, 2/91, 8/91 (by PRPs), 5/93, 4/95
- Original Proposed Plan Fact Sheet and Public Meeting: 1/88.
- Original ROD Fact Sheet: 4/88
- Milestone Fact Sheets: 4/87, 7&8/87 (by PRPs), 10/88, 1/89, 8&9/89, 3&4/90, 7&8/90, & 11/90 '93
- Commemorative event conducted with TNRCC, PRPs on 4/95
- Extensive media coverage
- Citizens on-site mailing list: 558
- Constituency Interest: Concerns have lessened, however, the PRPs and EPA continue to conduct periodic open houses to keep citizens informed.
- Site Repository: Crosby Public Library, 135 Hare Road, Crosby, TX 77532

Technical Assistance Grant

- Availability Notice: 4/88, Re-advertised 8/17/90 and 8/31/90
- Letters of Intent Received: (1) French Limited/Sikes Disposal Environmental Relief Committee - 4/25/88 (withdrawn) and (2) Barrett-Crosby Civic League - 8/21/90
- Final Application Received: 8/26/91
- Grant Award: 3/1/92
- Current Status: TAG closed 1998.

Contacts

- **Remedial Project Manager (EPA):** Ernest Franke, P.E., 214-665-8521, Mail Code: 6SF-AP
- **State Contact:** (TCEQ) Bob Wucher, 512-239-2494
- **Community Involvement (EPA):** Ernest Franke, P.E., 214-665-8521, Mail Code: 6SF-AP
- **Attorney (EPA):** Anne Foster, 214-665-2169, Mail Code: 6RC-S
- **State Coordinator (EPA):** Karen Bond, 214-665-6682, Mail Code: 6SF-AP
- **Prime Contractor:** French Limited Task Group

Activity Docket, Present Status and Issues

- The main waste lagoon at the site was divided into 2 parts for bio-remediation, and both sides were completed in 1993.
- The 7.5 acre lagoon was backfilled with clean soil in October, 1994.
- The contaminated plume has affected one residential well nearest the site. Vinyl Chloride was detected in drinking water well at 7 ppb (MCL is 2 ppb). The Potential Responsible Parties (PRPs) placed 2 residents on bottled water as soon as vinyl chloride was detected in the well. PRPs installed a deep potable water well for the affected residence. Old well had cracked surface casing which was causing very high fecal coliform. Old well was plugged.
- Additional extraction and injection wells were installed to aggressively pull plume back to site boundary.
- PRPs conducted Dense Nonaqueous Phase Liquids (DNAPLs) focused study to determine nature and extent, assess impacts to ground water and screen alternatives for possible treatment/containment.
- Study concluded that: Mobile DNAPL is contained within original sheet pile wall installed in 1989 around lagoon and DNAPL residue exists outside wall in small area on site outside of the wall: and that containment was the preferred alternative (digging up was cost prohibitive).
- PRPs installed sheet pile wall around small discreet area on site, part of which was placed in the

right-of-way beside the Gulf Pump Road.
- The ground water in-situ bioremediation and conventional pump and treat system were operational from 2/92 to 12/95.
- Aquifer Remediation System, Refinements, and Enhancement Reports prepared by FLTG, Inc., October 1994
- EPA, First Five-Year Review (Type 1a), signed January 1995
- 30 year post-closure monitoring requirements of Consent Decree commenced December 1995.
- Site Closure Plan, French Limited Project prepared by Southwestern Environmental Consulting, Inc., March 1996.
- Superfund Site Closeout Report, June 1996
- The French Limited site has had national and international attention due to the successful implementation of the innovative technology, bioremediation.
- Several "Toxic Tort" lawsuits have been settled by the PRPs for an undisclosed amount.
- In February and March 1998, 20 new and 5 converted oxygen injection wells were installed for enhancement of the remedy .
- Notice of Intent for Partial Deletion (source) was signed on 4/12/1999.
- 2nd Five-Year review dated February 2002, secured final EPA signature on 3/12/02.
- Site groundwater monitoring continues and an evaluation of Natural Attenuation meeting was held June 26,2002
- FLTG advises they have prepared a Risk Assessment to evaluate site contamination which will be included in its next submittal for EPA review.
- Natural Attenuation (NA) of groundwater began January 1996, scheduled completion January 2006.
- Comments on the Ground Water Evaluation, Remedial Progress and Risk Assessment Report were furnished FLTG by EPA . NA results on the GW remediation were addressed.

Benefits

- Remediation of the French Limited site will eliminate approximately 300,000 tons of lagoon sludge and soil, 800,000 tons of subsoil associated with the ground water cleanup, 11,000 tons of soil in shallow subsoil excavations around the perimeter, and the creation of 25 acres of new wetlands as per the Natural Resource Consent Decree, which was entered into Federal District Court on 3/10/93.